DISTRIBUTION UNIT MANAGERS' MEETING 200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS

0057081

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Dennis Faulk	EPA (B5-01)
Brenda Jentzen	WDOE (Kennewick) (B5-18) WDOE (Kennewick) (B5-18) WDOE (Kennewick) (B5-18)
Lynn Curry Garrett Day Bruce Ford Alison Bryan Greg Mitchem Joan Woolard	BHI (H0-19)BHI (H0-21)BHI (H0-21)BHI (H0-19)
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Stuart Luttrell	
Administrative Record (2)	BHI (H0-09)

Please inform Alison Bryan – BHI (372-9192) of deletions or additions to the distribution list.



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HANFORD PROJECT OFFICE

FEB 21 2002

U. S. E P A Revised 01/03/02

Meeting Minutes Transmittal/Approval Unit Managers' Meeting 200 Area Groundwater and Source Operable Units 3350 George Washington Way, Richland, Washington NOVEMBER 2001

APPROVAL: Bryan Foley, 200 Area Unit Manager, DOE/RL (A5-13)	Date	01/24/02
APPROVAL: Arlene Tortoso, Groundwater Unit Manager, DOE/RL (H0-12)	Date	02/06/02
APPROVAL: Dennis Faulk, 200 Area Unit Manager, EPA (B5-01)	Date	3-5-62
APPROVAL: John Price, 200 Area Unit Manager, Ecology (B5-18)	_ Date	5-Mar-02

Meeting minutes are attached. Minutes are comprised of the following:

Attachment 1	 Agenda
Attachment 2	 Attendance Record
Attachment 3	 200 Area Current Action Log
Attachment 4	 200 Area UMM Minutes - November 2001
Attachment 5	 Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites July 2001 – October 2001
Attachment 6	 Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites FY 1997 – FY 2002

Prepared by:

Alison Bryan, BHI GW/VZ Integration Project (H0-19)

Date 1-3-02

Concurrence by:

Bruce Ford, BHI GW/VZ Integration Project (H0-19)

UNIT MANAGERS' MEETING AGENDA

3350 George Washington Way November 29, 2001

9-11 a.m. <u>200 Area</u> <u>Room 1B45</u>

General (10 minutes)

- Outstanding Action Items (attached)
- Open for regulatory topics or action items

200-BP-5 (10 minutes)

Status on Groundwater Sampling and Analysis Plan

200-UP-1 (10 minutes)

- Pump and Treat treatment system operation's status
- Monitoring well installation and characterization sampling status
- · Open discussion

200-ZP-1 (10 minutes)

- · Status of Well Drilling at PFP
- · Pump and Treat treatment system operation's status
- Open discussion

200-PW-1 Plutonium/Organic-Rich Process Waste OU (10 minutes)

- Monthly Soil Vapor Monitoring
- Soil Vapor Extraction system
 - Active system status
 - Passive system status
 - Open discussion
- RI/FS Work Plan status

200-CS-1 Chemical Sewer OU (5 minutes)

Status Fieldwork (Test Pits)

200-CW-5 U Pond/Z Ditches Cooling Water OU (5 minutes)

Optimization of Shallow Casing Gamma Logging Task

Groundwater and Source Operable Units Unit Managers' Meeting Official Attendance Record – 200 Area November 29, 2001

Please print clearly and use black ink

7

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Craig Cameron	EPA	BP-5, MWY	376-8665
Garrett Day	BHI	Grandwater 04's	372-9571
Bruge Ford	BILI	200 Avec Tasklan	372-9105
Virginia Rohay	ERC	CC14 tech support	372-9100
Craig Swanson	CHi	PAT Tech Jupport	372.9353
Stuart Luttrell	PNNL	GW Mon. Proj.	
Arlem Tortoso	DOE	COWPM	373-9631
curt Wittreich	CHI	200 AHL	372-9586
Matt Mills	Foology	Cs-1	736-5721
Chris Cearlock	CHI	200-05-1	372-9638
			:

200 Area Unit Managers' Meeting OPEN ACTION ITEMS & TRACKING

AGUODE ?					Adition Adition to a section of the control of the	Onte Status Complete
	Distribution of UMM minutes for January, February,	Bruce Ford, BHI	Dennis Faulk,	06/28/2001		In review
	March, April, May, and June 2001	i	EPA		1	
			·			
						

MEETING MINUTES 200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS UNIT MANAGERS' MEETING -- 200 AREA November 29, 2001

Attendees: See Attachment #2

Agenda: See Attachment #1

Topics of Discussion:

1. General

- Outstanding Action Items (see attached) No discussion.
- Open for Regulatory Topics or Action Items No discussion.

2. 200-BP-5

Status on Groundwater Sampling and Analysis Plan – EPA is working with DOE-RL on the Sampling and Analysis Plan. It has been submitted for signature.

3. 200-UP-1

- Pump and Treat Treatment Systems Operations Status The system is operating at 45 gallons per minute. A new extraction well will be added by the end of December.
 It is estimated it will increase the extraction rate by 10 to 15 gallons per minute.
- Monitoring Well Installation and Characterization Sampling Status The use of one
 of the monitoring wells as a backup extraction well is being considered.

4. 200-ZP-1

- Status of Well Drilling at PFP Drilling resumed November 26, 2001, at the alternate well location. Currently the well is at 52 feet in depth. Two soil samples and one vapor sample have been collected. No carbon tetrachloride was detected. An estimated completion date is January 31, 2002.
- <u>Pump and Treat Treatment System Operations Status</u> The flow is running at 150 to 175 gallons per minute. The extraction rates are being fine-tuned.

200-PW-1 Plutonium/Organic-Rich Process Waste OU

 Monthly Soil Vapor Monitoring – A handout was distributed and reviewed by Virginia Rohay regarding carbon tetrachloride vapor monitoring. (Attached) The data showed nothing inconsistent with past readings.

Soil Vapor Extraction System –

- Active System Status The system has been shut down for the winter.
- Passive System Status The passive extraction data, beyond what was in the annual report in September, are not yet available.
- <u>RI/FS Work Plan Status</u> The Work Plan is on schedule. DOE/RL has reviewed the Work Plan and comments were incorporated. It will be delivered to EPA by the end of December.

5. 200-CS-1 Chemical Sewer OU

• Status Fieldwork (Test Pits) – The test pit characterization activities for the 200-CS-1 OU and the 216-A-29 Ditch Sampling for Project W-211 were conducted from October 29 to November 2, 2001. Test pits AD-1, AD-2, and AD-3 were completed at the 216-A-29 Ditch. Test pit BT-2 at the 216-B-63 Trench was started, but then terminated (when significant contamination was encountered) due to concerns of contaminating the non-regulated excavator. A reading of 1250 cpm beta/gamma were observed at this depth. The test pit characterization activities were temporarily put on hold until a regulated excavator is available for use for the remaining test-pits. A regulated excavator is expected to be available for use in late-January/early-February. Test pit BT-2 will be relocated 10 to 20 ft upstream of the original location and samples will be collected in accordance with the Work Plan.

A preliminary review of the AD-3 Test Pit (CHG test pit) data from the 216-A-29 Ditch indicates that the radionuclides detected are at background concentrations. Th-228, Th-232, Ra-226, Ra-228, U-233, and U-238 were the primary radionuclides detected at concentrations less than 1.5 pCi/g. K-40 was also detected at background concentrations. Cs-137, Sr-90, and Pu-239 were not detected above the method detection activity (MDA).

For the nonradionuclides, all VOCs, PCBs, and Diesel Range Organics were below detection limits for all samples. Several SVOC were detected at low levels in only the 5.0-6.0 ft sample. All others sample intervals were below detection limit for SVOCs. The maximum concentrations detected in the samples for lead and arsenic were 11.7 mg/kg and 12.2 mg/kg, respectively. Hydrazine, as expected, was not detected above detection limits for any of the samples.

A summary report for the CHG test pit work at the 216-A-29 Ditch for project W-211 will be completed in December. A contained-in-determination for the removal of the U-133 code (hydrazine) for investigation derived waste at the 216-A-29 Ditch will be submitted to Ecology in late-January.

Analytical data for the test pits AD-1, AD-2, and BT-2 are expected in mid-December.

6. 200-CW-5 U Pond/Z Ditches Cooling Water OU (5 minutes)

• Optimization of Shallow Casing Gamma Logging Task – A meeting with EPA will be scheduled for sometime in the first week of December to provide some information to EPA and to discuss ways to cost-effectively complete the shallow gamma logging.

Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites July 2001 - October 2001

200-PW-1 (200-ZP-2) 07/31/2001 08/30/2001 09/25/2001 11/05/2001 Location Site Zone										
Location Site Zone (Well or Probe) CCl4 CCl4 CCl4 CCl4 /feet bgs (ppmv) (ppmv) (ppmv) (ppmv) CPT-17/ 10 ft Z-9 2 2 CPT-18/ 15 ft Z-9 2 2 CPT-16/ 25 ft Z-9 2 2 CPT-32/ 25 ft Z-1A 2 0 0 0 CPT-4A/ 25 ft Z-1A 2 0 0 0 CPT-30/ 28 ft Z-1A 2 0 0 0 CPT-13A/ 30 ft Z-1A 2 0 0 1.9										
(Well or Probe) CCI4 CCI4										
/feet bgs (ppmv) (ppmv) (ppmv) (ppmv) CPT-17/ 10 ft Z-9 2 CPT-18/ 15 ft Z-9 2 CPT-16/ 25 ft Z-9 2 CPT-32/ 25 ft Z-1A 2 0 0 0 CPT-4A/ 25 ft Z-1A 2 0 0 0 CPT-30/ 28 ft Z-1A 2 0 0 0 CPT-13A/ 30 ft Z-1A 2 0 0 1.9										
CPT-17/ 10 ft Z-9 2 CPT-18/ 15 ft Z-9 2 CPT-16/ 25 ft Z-9 2 CPT-32/ 25 ft Z-1A 2 0 0 CPT-4A/ 25 ft Z-1A 2 0 0 0 CPT-30/ 28 ft Z-1A 2 0 0 0 CPT-13A/ 30 ft Z-1A 2 0 0 1.9										
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CPT-16/25 ft Z-9 2 CPT-32/25 ft Z-1A 2 0 0 0 CPT-4A/25 ft Z-1A 2 0 0 0 CPT-30/28 ft Z-1A 2 0 0 0 CPT-13A/30 ft Z-1A 2 0 0 1.9										
CPT-32/25 ft Z-1A 2 0 0 0 CPT-4A/25 ft Z-1A 2 0 0 0 CPT-30/28 ft Z-1A 2 0 0 0 CPT-13A/30 ft Z-1A 2 0 0 1.9										
CPT-4A/ 25 ft Z-1A 2 0 0 0 CPT-30/ 28 ft Z-1A 2 0 0 0 CPT-13A/ 30 ft Z-1A 2 0 0 1.9										
CPT-30/ 28 ft Z-1A 2 0 0 0 CPT-13A/ 30 ft Z-1A 2 0 0 1.9										
CPT-13A/30 ft Z-1A 2 0 0 1.9										
CPT-7A/32 ft 7-1A 2 3.8 4.2 4.1										
101 1 177 0E 10 1 E 1 0.01 4.E 4.11										
CPT-27/ 33 ft Z-9 2										
CPT-1A/ 35 ft Z-12 2 11.3 10.5 9.5										
CPT-28/ 40 ft Z-9 2 52.8 54.8 56.5										
CPT-33/40 ft Z-1A 2 0 1.1 1.6										
CPT-34/40 ft Z-18 2 1.5 1.8 2.2										
CPT-21A/ 45 ft Z-9 2 90.9 133 126										
CPT-9A/ 60 ft Z-9 2 38.1 39 45.3										
CPT-32/70 ft Z-1A 2 4.0 3.9 4.3										
CPT-4A/ 75 ft (b) Z-1A 2 7.1										
W15-82/ 82 ft										
W15-95/ 82 ft Z-9 2										
CPT-21A/ 86 ft										
CPT-28/87 ft Z-9 2 167 225 220 1										
CPT-1A/ 91 ft Z-12 2 5.7 6.8 8.3										
CPT-4A/ 91 ft (a) Z-1A 2 7.5 7.5										
CPT-9A/ 91 ft Z-9 2 57.2 62.3 74.3										
W18-165/ 108 ft Z-1A 2										
W18-152/ 113 ft Z-12 2 10.2 22.8 25.7										
W15-217/ 115 ft Z-9 3										
W18-158L/ 123 ft Z-1A 3 90.6 163 159										
W18-167/ 123 ft Z-1A 3 283 229 248 2										
W18-249/ 134 ft Z-18 3 44.6 161 196										
W18-248/ 136 ft Z-1A 3 306 274 236 2										
W15-9L/ 189 ft Z-9 6										
(a) Water noted in line at CPT-4A/ 91 ft, 7/31/01, 8/30/01.										
This is the first time that water has been encountered during ZP-2 sampling.										
(b) Substitute for CPT-4A/ 91 ft										
(c) not sample-ready										

Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites FY 1997 - FY 2002

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200-PW-1			November 19	X .	October 1997 - July 1998 -		July 1999 -		July 2001 -		October 2001 -			
(200-ZP-2)			July 1997	-	September 19		September 1999		June 2001		September 2001		March 2002	
Location	Site	Zone		nonths					Maximum Rebound	months'	Maximum Rebound		เงเราเนเกม มะรากกะก	HILLING IS
(Well or Probe)		Ī	Carbon Tetrachiorid	of	Carbon Tetrachlorid	of	Carbon Teirachiorid	of	Carbon Tetrachionol	of	Carbon Tetrachlorid		Carbon Tetrachioride	of
/leel bgs			(ppmv)	ebound	(ppmv)	rebound	(ppmv)	rebound	(ррту)	rebound	(ррту)	rebound	(ppmv)	rebound
79-03/ 5 h	Z-18	_	0	8_	0									
79-06/ 5 ft	Z-1A	1	not measured		not measured		1.4							— —
79-11/5 ft	Z-1A	1	. 0	B		6	2.9					ļ <u> </u>		-
86-05/ 5 h	Z-0	1 1	not measured		not measured		9							_
86-05-01/ 5 ft 86-06/ 5 ft	Z-9 Z-9	1	not measured	-	not measured	9	1,8					\vdash		
87-05/ 5 It	Z-1A	+	1.3 not measured	<u> </u>	8		1.0							
87-09/ 5 It	Z-IA	 	not measured	 -	1.5		2.6		 					
94-02/ 5 ft	Z-0	1	0	8	not measured		1.4	•—			******			
96-11/5 ft	Ž-0	1	0	8	2.1	9	2.5							
95-12/ 5 ft	Z-9	-	1.1	8	1.5	9	1.3	6						
95-14/5 N	Z-9	1	not measured		not measured		Ċ	3						
CPT-13A/9 ft	Z-1A	2	not measured				1.0							
CPT-16/ 10 R	Z-9	2	not measured		0		1.5							
CPT-17/ 10 ft	2-0	2	not measured	ļ	4.2		5.1		8.6	24			2.5 1.2	1
CPT-18/ 15 h	7.14	2	not measured	 	6.5 0	9	5.0		5.2	24			1.2	'
CPT-31/26 ft CPT-16/ 26 ft	Z-1A Z-9	2	not measured not measured	 	not measured	6	nol measured	12	1.8	24			- 0	-
CPT-32/ 26 ft	Z-1A	2	not measured		9.1	6	10	12	16.5	18	0	3	Ö	
	Z-1A	2	not measured		not messured	-	not measured		3.5	- 6	0			
	Z-18	2	not measured		not measured		3.2		1.4	18	G		0	4
CPT-13A/ 30 ft	Z-1A	2	2.2	8	not measured		not measured	1	3.6	18	2	3	1.9	4
	Z-1A	2	not measured		2.3	6	5.4	12	6.2	18	4.2	3	4.2	4
CPT-27/ 33 h	Z-9	2	1.2	- 8	not measured		not measured		2.6	24			1.2	1
	Z-18	2	2.0		1.4	3	3.0	12	7,7	18	11.3	3	11.3	4
CPT-28/ 40 ft CPT-33/ 40 ft	Z-9 Z-1A	2	40.1	8	2.0	3	2.6	12	ļ		56.5 2	3		
CP1-34/ 40 ft	Z-18	2	not measured 2.3	8	not measured	-3	1.7		1.0	0	2.2	3		
CPT-21A/ 45 H	Z-0	2	55.6	8	52.7	9	57		127	24	133	ŏ	133	1
	Z-0	2	2	8	not measured		1.6		2.5	24				
CPT-28/ 60 N	Z-9	2	not measured		1.5	0	3.7	3						
CPT-9AV 60 N	Z-0	2	45.5	8	41.1	٥	44	3	68	24	45.3	0	45.3	_
	Z-18	2	1.7	8	not measured		3.0	12						
	Z-1A	2	7.4	8							4.3	3		
	Z-1A	2	5.2	θ.	not measured		5.6							
CPT-24/70 ft W15-21988T/ 70 ft	Z-9	2	not measured		3.2	-8-	3.6 7.6		7.6	24				
CPT-18/75 ft	Z-0	2	14.6 not measured	-	not measured not measured		not measured		7.8 18	24				
	Z-1A	2	not measured		not measured		not measured		not measured		7.1	3		
	Z-1A	2	4.0	8	not measured		4.2	12						
CPT-33/ 80 ft	Z-1A	2	5.8	8	not measured		9.2	12						
W15-82/ 82 ft	Z-9	2	28.9	-8	5.5	9	46		55	24			15.6	1
W15-95/ 82 ft	Z-0	2	not measured		15.3	9	30		43	21			0	1
CPT-21A/ 86 H	Z-0	2	221	8	206	9	148		195	24	186	0	186	1
	Z-18	2	36.3	8	5.9	3	0							
W15-2186ST/ 86 N	Z-9 Z-9	2	not measured 280	8	not measured 230	9	203		224	24	225	0	225	1
	Z-18	2	3.9	å	not measured		4.2	12	- 224		8.3	37		
	Z-1A	2	not measured		7.7	3	14		······································		7.5	3		
CPT-9A/91 R	7-0	2	103	8	34.5	9	72				74.3	0		
W16-85/92 N	2-0	2	not measured		not messured		not measured		51	24				
W18-25258T/ 100		2	38.2	8	17.8	3	24	12						آسيا
	Z-1A	2	not measured		not measured		not measured		not measured		not measured	اا		4
	Z-12	- 2	46.8	. 8	11,1	3	33		25	18	25.7	3	25.7	4
W15-217/ 115 R	Z-0	3	797	-	630	9	561	6	442	24			. 86	
CPT-24/ 118 R W15-220S\$T/ 118	Z-9	3 4	44.6,	8	37.7 not measured	9	37 36		35 34	24				
W18-158L/ 129 R		3	not measured		143	3	492		284	18	163	3		
W18-167/ 123 R		<u>3</u>	323	8	79.7	3	228		248	18	263	3	283	4
W18-2198ST/ 130		4	298	8	not measured		47		54	24				
W10-249/ 134 R		3	206	8	20.4	3	215		176	18	196	3	196	4
	Z-1A	3	288	8	86.3	3	177		214	18	306	3	306	4
W16-21988T/ 155		5	59.6	8	not measured		24		44	24				
W15-220S8T/ 185		5	14.5	8	not measured		13		15	24				
	Z-0	6	22.6	8	17,8		1.3	_						
W16-9L/ 189 ft	Z-9	6	18.3	- 8	15.0		15		20	21				1
	Z-1A	6	28.5	-8	17.3	3	29		ļ .				 	
	Z-1A	<u></u>	36	-8	31.3	- 6	15		 				 	
W18-12/210 h	Z-18	6	not messured		3.8	3	19	12	l 					

^{* -} besed on location (Z-1A/18/12 or Z-9) of monitoring point; specific points may be beyond SVE zone of influence during particular operating configurations
- Z-18 and Z-12 wells off-line Oct 96 - Apr 98
- CPT-1A, CPT-9A, and possibly CPT-7A appeared to be beyond SVE zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)
- CPT-9A, CPT-21A, CPT-25 beyond SVE zone of influence in May 96 based on CCI4 concentrations and eirliow modeling based on measured vacuums (BHI-01105, p. 6-1)